## Amendments To Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

- 1-7. (Canceled)
- 8. (New): A block-up converter comprising:
  - a subharmonic mixer;
    - wherein said subharmonic mixer is configured to receive a first input signal, wherein said first input signal is an intermediate frequency signal;
    - wherein said subharmonic mixer is further configured to receive a second input signal, wherein said second input signal is a local oscillator signal in the Ku band or lower,
    - wherein said subharmonic mixer is configured to output a RF signal having a frequency greater than 26 GHz;
  - a filter configured to receive said RF signal and filter unwanted spurious signals which may be present in said RF signal; and
  - a power amplification device configured to receive said RF signal and to provide a desired signal gain;
  - wherein said subharmonic mixer, said filter, and said amplification device are located on a single multi-chip module, such that all signal interfaces with said multi-chip module occur at frequencies less than 26 GHz except for the final output of said RF signal from said multi-chip module;
    - wherein said multi-chip module is configured to be surface mounted using a lead frame interface;
  - wherein said block-up converter is configured to be a high power block-up converter, wherein high power is defined to be any power greater than 1 Watt; and
  - wherein said block-up converter is configured to provide a high frequency output, wherein high frequency is defined to be any frequency greater than 26 GHz.

- (New): The block-up converter of claim 8, further comprising a wave-guide interface configured to output said RF signal from said multi-chip module.
- 10. (New): The block-up converter of claim 8, further comprising an insert coupled to said high power amplification device, wherein said insert comprises a material characteristic of at least one of: high thermal conductivity and low thermal expansion properties.
- 11. (New): The block-up converter of claim 8, further comprising a chassis and a cover, wherein said chassis and said cover are secured together to substantially encase said block-up converter.
- 12. (New): The block-up converter of claim 8, wherein said multi-chip module is configured to be a drop-in component within the next higher assembly level.
- (New): A block-up converter comprising:
  a subharmonic mixer;
  - wherein said subharmonic mixer is configured to receive a first input signal, wherein said first input signal is an intermediate frequency signal;
  - wherein said subharmonic mixer is further configured to receive a second input signal, wherein said second input signal is a local oscillator signal in the Ku band or lower;
  - wherein said subharmonic mixer is configured to output a RF signal having a frequency greater than 26 GHz;
  - a filter configured to receive said RF signal and filter unwanted spurious signals which may be present in said RF signal; and
  - a power amplification device configured to receive said RF signal and to provide a desired signal gain;
    - wherein said subharmonic mixer, said filter, and said amplification device are located on a single multi-chip module,
  - wherein said block-up converter is configured to be a high power block-up converter, wherein high power is defined to be any power greater than 1 Watt; and

- wherein said block-up converter is configured to provide a high frequency output, wherein high frequency is defined to be any frequency greater than 26 GHz.
- 14. (New): The block-up converter of claim 13, wherein said multi-chip module is configured to be surface mounted using a lead frame interface.
- 15. (New): The block-up converter of claim 13, further comprising a wave-guide interface configured to output said RF signal from said multi-chip module.
- 16. (New): The block-up converter of claim 13, further comprising an insert coupled to said high power amplification device, wherein said insert comprises a material characteristic of at least one of: high thermal conductivity and low thermal expansion properties.
- 17. (New): The block-up converter of claim 13, further comprising a chassis and a cover, wherein said chassis and said cover are secured together to substantially encase said block-up converter.
- 18. (New): The block-up converter of claim 13, wherein said multi-chip module is configured to be a drop-in component within the next higher assembly level.
- 19. (New): A method for assembling a block-up converter on a single multi-chip module, the method comprising the steps of:
  - electrically connecting a subharmonic mixer on a multi-chip module to a filter on said multi-chip module;
    - wherein said subharmonic mixer is configured to receive a first input signal, wherein said first input signal is an intermediate frequency signal;
    - wherein said subharmonic mixer is further configured to receive a second input signal, wherein said second input signal is a local oscillator signal in the Ku band or lower;
    - wherein said subharmonic mixer is configured to output a RF signal having a frequency greater than 26 GHz;
    - wherein said filter is configured to receive said RF signal and filter

unwanted spurious signals which may be present in said RF signal; and

- electrically connecting said filter to a power amplification device that is also located on said multi-chip module,
  - wherein said power amplification device is configured to receive said RF signal and to provide a desired signal gain;
- wherein said block-up converter is configured to be a high power block-up converter, wherein high power is defined to be any power greater than 1 Watt; and
- wherein said block-up converter is configured to provide a high frequency output, wherein high frequency is defined to be any frequency greater than 26 GHz.
- 20. (New): The method of claim 19, further comprising the step of electrically connecting said power amplification device to a wave-guide interface on said multi-chip module that is configured to output said RF signal from said multi-chip module.
- 21. (New): The method of claim 19, further comprising the step of surface mounting said multi-chip module using a lead frame interface to the next higher assembly level.
- 22. (New): The method of claim 19, further comprising the step of securing a chassis and a cover together to substantially encase said block-up converter.
- 23. (New): The method of claim 21, further comprising the step of electrically connecting a driver amplifier, also located on said multi-chip module, between at least one of said subharmonic mixer, said filter, and said power amplification device.